

SEQUENCE LISTING

<110> Mitsuhashi, Kazuya
Yamamoto, Hiroaki
Matsuyama, Akinobu
Tokuyama, Shinji

<120> D-aminoacylase and gene encoding the same

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<150> JP 2000-019080

<151> 2000-01-27

<150> JP 2000-150578

<151> 2000-05-22

<160> 27

<170> PatentIn Ver. 2.0

<210> 1

<211> 1677

<212> DNA

<213> Hypomyces mycophilus

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<210> 2

<211> 558

<212> PRT

<213> Hypomyces mycophilus

<400> 2

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15

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20

25

30

Ile Ala Lys Ile Gly Asn Pro Gly Ser Ile Asn Ala Thr Pro Asp Thr

35

40

45

Arg His Leu Asp Val Thr Gly Tyr Ile Leu Ser Pro Gly Phe Ile Asp

50

55

60

Met His Ala His Ser Asp Leu Tyr Leu Leu Ser His Pro Asp His Glu

65

70

75

80

Ala Lys Ile Thr Gln Gly Cys Thr Thr Glu Val Val Gly Gln Asp Gly

85

90

95

Ile Ser Tyr Ala Pro Ile Arg Asn Val Asp Gln Leu Arg Ala Ile Arg

100

105

110

Glu Gln Ile Ala Gly Trp Asn Gly Asn Pro Thr Asp Glu Glu Cys Arg

115

120

125

Thr Thr Leu Lys Gly Val Gly Met Phe Glu Trp Gln Thr Ile Gly Glu

130

135

140

Tyr Leu Asp Cys Leu Glu Arg Asn Arg Thr Ala Thr Asn Val Ala Met

145

150

155

160

Leu Val Pro Gln Gly Asn Leu Arg Leu Leu Ala Cys Gly Pro Tyr Asp

165

170

175

Thr Pro Ala Ser Ala Glu Glu Ile Gln Asp Gln Ile Gln Leu Leu Arg

180

185

190

Glu Ala Met Ala Gln Gly Ala Val Gly Met Ser Ser Gly Leu Thr Tyr

195

200

205

Thr Pro Gly Met Tyr Ala Ser Thr Ser Glu Leu Ala Ser Leu Cys Ala

210

215

220

Ala Leu Ala Gln Glu Phe Pro Gly Ala Phe Tyr Ala Pro His His Arg

225

230

235

240

Ser Tyr Gly Phe Gln Ala Ile Glu Ser Tyr Ala Glu Met Leu Asp Leu

245

250

255

Gly Glu Ser Thr Gly Cys Pro Ile His Leu Thr His Ala Thr Leu Asn

260

265

270

Phe Ser Glu Asn Lys Gly Lys Ala Pro Val Leu Ile Ser Met Val Asp

275

280

285

Lys Ser Leu Ala Ala Gly Val Asp Val Thr Leu Asp Thr Tyr Pro Tyr

290

295

300

Leu Pro Gly Cys Thr Thr Leu Ala Ala Leu Leu Pro Ser Trp Ala Ser

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310

315

320

Ala Gly Gly Pro Gln Glu Thr Leu Lys Arg Leu Glu Asp Ala Glu Ser

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330

335

Arg Glu Lys Ile Arg Ile Ala Val Glu Ile Lys Gly Cys Asp Gly Gly

340

345

350

His Gly Ile Pro Thr Asn Trp Asp Glu Ile Gln Ile Gly Thr Thr Asn

355

360

365

Glu Pro Ser Ile Ala Ser Tyr Ser Gly Arg Arg Leu Ser Glu Val Ala

370

375

380

Gln Ser Val Gly Lys Pro Thr Ile Glu Val Phe Phe Glu Ile Leu Gln

385

390

395

400

Lys Asp Lys Leu Ala Thr Ser Cys Ile Met His Val Gly Asn Glu Glu

405

410

415

Asn Val Arg Gln Ile Met Gln His Arg Val His Met Ala Gly Ser Asp

420

425

430

Gly Ile Leu His Gly Gln Thr Leu His Pro Arg Ala Tyr Gly Thr Phe

435

440

445

Thr Arg Tyr Leu Gly His Tyr Ser Arg Glu Leu Ser Leu Val Ala Leu

450

455

460

Pro Ser Met Ile Ala His Leu Thr Ser Arg Pro Ala Lys Arg Leu Ser

465

470

475

480

Val Tyr Pro Tyr Arg Gly Leu Ile Ala Glu Gly Ser Ala Ala Asp Ile

485

490

495

Val Val Phe Asn Pro Glu Thr Val Lys Asp Met Ser Thr Tyr Glu Glu

500

505

510

Pro Lys Val Pro Ser Arg Gly Ile Arg Phe Val Leu Val Asn Gly Gln

515

520

525

Ile Ala Val Asp Glu Gly Lys Met Thr Gly Thr Arg Gly Gly Lys Thr

530

535

540

Leu Arg Arg Ser Thr Asp Gly Lys Val Lys Ala Arg Asp Glu

545

550

555

<210> 3

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Artificially
Synthesized Primer Sequence

<400> 3

cccggtttca tcgacatgca

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<210> 4

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Artificially
Synthesized Primer Sequence

<400> 4

ttcatgcaca tgcaygcnca

20

<210> 5

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Artificially
Synthesized Primer Sequence

<400> 5

tgnngngcrt craangcytg

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<210> 6

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Artificially
Synthesized Primer Sequence

<400> 6

aangcytgng grtaytcrtc

20

<210> 7

<211> 321

<212> DNA

<213> Hypomyces mycophilus

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 cgaagagctg gagctacatg gcctggcaat gccgaacctg ggcaatataa acgagcaatc 180
 catcgccggc gccatatcta caggcacaca cggcagcagc atccaccacg gcctcatgtc 240
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321

<210> 8

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Artificially
 Synthesized Primer Sequence

<400> 8

aggccaaaat caccaagga

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<210> 9

<211> 20

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Artificially
 Synthesized Primer Sequence

<400> 9

attgggaaat acttggattg

20

<210> 10

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Artificially
Synthesized Primer Sequence

<400> 10

ctggttcttt ccgcctcaga

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<210> 11

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Artificially
Synthesized Primer Sequence

<400> 11

attaaccctc actaaaggc

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<210> 12

<211> 1325

<212> DNA

<213> Hypomyces mycophilus

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agaggctatg gctcagggtg ctgtcggat gtctagtggt ctcacttata caccggcat 180
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<210> 13

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Artificially
Synthesized Primer Sequence

<400> 13

cggagagtca acaggctgtc c

21

<210> 14

<211> 20

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Artificially
Synthesized Primer Sequence

<400> 14

cgcaggctat cagaagtggc

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<210> 15

<211> 20

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Artificially
Synthesized Primer Sequence

<400> 15

atcgccctca actgggtctac

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<210> 16

<211> 20

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Artificially
Synthesized Primer Sequence

<400> 16

catatgatat cccgttttgg

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<210> 17

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Artificially
Synthesized Primer Sequence

<400> 17

gattttggcc tcgtggtcag

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<210> 18

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Artificially
Synthesized Primer Sequence

<400> 18

cctcagtggaa tgttgccttt ac

22

<210> 19

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Artificially
Synthesized Primer Sequence

<400> 19

gcctgtacgg aagtgttact

20

<210> 20

<211> 253

<212> DNA

<213> Hypomyces mycophilus

<400> 20

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aatcttgca atcagtcct tcgaaaccag cacatcgcc acaaaggct gggctgctc 180
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gaattcttct ggt 253

<210> 21

<211> 32

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Artificially
Synthesized Primer Sequence

<400> 21

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<210> 22

<211> 30

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Artificially
Synthesized Primer Sequence

<400> 22

gagaagctta ccagaagaat tcccattgcc

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<210> 23

<211> 32

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Artificially
Synthesized Primer Sequence

<400> 23

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<210> 24

<211> 30

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Artificially
Synthesized Primer Sequence

<400> 24

gagaagctta ttgaccattt ccccatgac

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<210> 25

<211> 1897

<212> DNA

<213> Hypomyces mycophilus

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<210> 26

<211> 25

<212> PRT

<213> Hypomyces mycophilus

<400> 26

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5

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15

Leu Tyr Leu Leu Ser His Pro Thr His

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25

<210> 27

<211> 20

<212> PRT

<213> Hypomyces mycophilus

<400> 27

Val Leu Ala Asp Glu Tyr Pro Gln Ala Phe Tyr Ala Pro His Ala Tyr

1

5

10

15

Ser Arg Gly Phe

20